

Statistics (STAT)

STAT 4301 Biostatistics 3 SCH (3-0)

For students in biology, health sciences, human sciences, and wildlife science. Descriptive and inferential statistics, basic probability concepts, probability distributions, estimation, hypothesis testing, correlation, simple linear regression, principles of epidemiology, statistical vs. clinical significance, and quasi-statistical methods. Prerequisite: MATH 1314.

Fee: \$15.00

STAT 4303 Statistical Methods 3 SCH (3-0)

Calculus-based probability, discrete and continuous random variables, joint distributions, sampling distributions, the central limit theorem, descriptive statistics, interval estimates, hypothesis tests, ANOVA, correlation, and simple regression. Prerequisite: MATH 2414.

Fee: \$15.00

STAT 4350 Probability 3 SCH (3-0)

Sample spaces, combinatorics, independence, conditional probability and Bayes' rule. Discrete and continuous probability distributions, Chebychev's inequality and limit theorems. Prerequisite: MATH 2414.

STAT 4351 Math Theory of Statistics 3 SCH (3-0)

Sampling distributions, estimation properties and methods, testing hypothesis, power of tests and likelihood ratios. Prerequisites: STAT 4350 or the equivalent and 3 semester hours of advanced mathematics.

STAT 4390 Selected Topics in Statistics 3 SCH (3-0)

Topics in statistics not adequately covered in regular courses. This course may be repeated for credit as topic changes. Prerequisite: 3 semester hours of advanced mathematics or statistics.